puncture she was comatose, with dilated, uneven and sluggish pupils, gummy conjunctival secretion, general tremor,—the usual phenomena of the stage of effusion. A large antitoxin needle was used, and 24 c.c. of fluid were withdrawn, but the fluid flowed freely only when the needle was depressed Too much force was accidentally used in depressing the needle, and it broke deeply in the tissues of the back. A deep incision and thorough search failed to reveal the fragment. A few hours after the puncture the temperature rose to 104.8 and the pulse to 136. Up to that time the temperature had not risen above 101 or the pulse above 100. On the following day the puncture was repeated and eight drachms of fluid withdrawn. After the second puncture there was a partial return of consciousness and temporary relief of the pressure phenomena, She died, however, two days later. No autopsy, The fluid withdrawn was clear, depositing a few flocculi of fibrin after standing. Pneumococci were present in large numbers.

In the discussion of the foregoing papers Dr Fruitnight said that he had seen the operation done repeatedly without bad results Dr. Blackader had resorted to the procedure two or three times, and in one case there seemed to be a very decided improvement in the symptoms for some time. Dr. Holt said that he had employed the puncture three times and had removed as much as three ounces of fluid, but had observed no change in the symptoms. He thought the operation was not likely to prove of great value in diagnosis. Dr. Wentworth remarked that the inoculation method was the only sure way to control the diagnosis and to learn positively whether tubercular meningitis was ever recovered from. So far, in cases which have recovered, the diagnosis has depended upon cover glass preparations, where a mistake in diagnosis was possible.

Babcock (State Hospital Bulletin, N. Y., July, 1896) reports on nineteen cases in asylum practice in which puncture was done. The operation was performed in twelve cases of general paralysis, in two cases of simple melancholia with pressure symptoms (intense headache, stupor, photophobia), and one case each of locomotor ataxia, stuporous melancholia, organic dementia and status epilepticus.

The author ordinarily used only local anæsthesia (cocaine injections), and agrees with others that the operation is not very difficult, nor has he seen unpleasant consequences, except intense transitory headache. Queerly enough, he seems to think that the needle is to be inserted alongside of the cord, whereas, as is well known, the cord is above the site of the puncture,—even if this be made, as was sometimes done by Babcock, between the first and second lumbar vertebra. This is, however, unnecessarily close to the cord, and we would counsel a lower site. The therapeutic results of the operation cannot be considered very good. Some cases were entirely unaffected by it. Some showed a slight improvement for a few hours, and in only two (one of general paralysis and one of subacute mania with locomotor ataxia) was there decided improvement lasting for several weeks (to the time of the report). In the second of these it is a question how much the operation had to do with the improvement, as this did not begin until a week after the puncture, ample time for reaccumulation of the amount of fluid (95 c.c.) removed. We would conclude from the report that lumbar puncture in the insane possibly constitutes a legitimate field for experiment, but that at present it promises to add very little to the therapy of psychiatry. PATRICK (Chicago).

OPHTHALMOPLEGIC MIGRAINE (PERIODICAL OCULOMOTOR PARALYSIS)

Dr. d'Alchè (*Jour. de Med. et de Chir. prat.*, July 25, 1896) was able up to the present time to collect the reports of twenty-five cases in the literature bearing upon this disorder. First described in Germany, ophthalmoplegic migraine was then studied and published in France by Parinaud and Marie, afterwards by Charcot and Ballet. According to

Charcot the malady is not an entity, but a symptomatic complex, characterized by the presence of hemicrania with concurrent total paralysis of one of the oculomotor nerves. The one sided head-ache is quite characteristic, and emphasized by the various observers. The intensity of the pain is seldom very great, but deeply seated, continuous, with morning or evening exacarbations, and extending from the occiput to the orbit. The ocular paralysis sets in after the development of hemicrania; it is invariably unilateral, and nearly always a complete palsy. Another characteristic feature, observed by all, is the tendency and periodicity of relapses, as for instance, once or twice yearly, every three months, etc. In one case (Moebius) every August for three consecutive years, in another, (Thomsen) in May and October. After a certain length of time, the disease undergoes a change, the symptoms becoming more permanent and continuous. 1. Periodical stage; 2 Permanent stage. A typical attack of *migraine ophthalmoplegique* presents, during the *painful period*, the same features as ordinary migraine (nausea, vomiting, photophobia and hemicrania), at times wtth œdema of the eyelids, and salivation. The duration is quite variable and sooner or later exacerbations intervene. The onset is generally sudden without any definite cause.

The *paralytic period* sets in generally several hours or days, or, rarely, weeks after the painful and gastric symptoms. The upper eyelid begins to droop, the bulb deviates externally and the whole distribution of one of the third nerves is impaired (paralysis of the iris, the muscles of accomodation as well as the external eye muscles). The development of these phenomena is rapid without being sudden as in cerebral hemorrhage. The painful symptoms (migraine) usually continue during the paralytic stage for some time, but are less marked or intense, which fact is in opposition to Charcot, who considered the on set of the latter period as indicative of cessations of tho former. The paralytic troubles may last for hours or months, disappearing as they set in, rapidly, the patient feeling as well as ever after the attack. New attacks are always to be anticipated, which invariably have the same characteristics as the preceeding one.

As the malady grows older it takes a chronic character (Thomsen's case lasted for 29 years), the paralytic attacks becoming rarer but more tenacious, and in the intervals between, the symptoms persistent with periods of exacerbations, which gives the malady the character of a continuous disorder with periodical exacerbations. The tendency to become aggravated is far greater than to recover, although there may be a possibility of a spontaneous cure. The ætiology and pathology are quite obscure, although the subject of considerable speculation. The treatment consists in the prolonged administaation of bromides (Charcot) with potassiie iodide for circulatory disturbances, and electricity. The last especially when the paralysis of the eye muscles is permanent.

MACALESTER.

A CASE OF TABES DORSALIS WITH BULBAR SYMPTOMS.

Deutsche Zeitschrift für Nervenheilkunde. Vol. 9, Nos. 1 and 2, 1896. By H. Grabower, M. D.

In a case of tabes the following conditions were found. Degeneration of the left recurrent nerve and of the extrabulbar portion of the roots of both tenth nerves, perfect integrity of the roots of both eleventh nerves, degeneration of the roots of both ninth nerves, integrity of the nuclei and intrabulbar portion of the roots of the tenth and eleventh nerves, moderate degeneration of both spinal roots of the fifth nerves. The nuclei of the third, fourth and sixth nerves were atrophied.

The author is inclined to accept the theory that in certain cases the tabetic process begins in the peripheral sensory nerves, and ascends to